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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/717,184

11/20/2000

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BLU-005

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04/25/2008

EXAMINER

TRAN, PHILIP B

ART UNIT

PAPER NUMBER

2155

MAIL DATE

DELIVERY MODE

04/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/717,184	BLUMENAU, TREVOR I.	
	Examiner	Art Unit	
	Philip B. Tran	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-127 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-127 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action replaces the last office action which has been withdrawn.
Claims 1-127 are pending and therefore are presented for further examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-127 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner et al (Hereafter, Kenner), U.S. Pat. No. 5,956,716 in view of Guenthner et al (Hereafter, Guenthner), U. S. Pat. No. 6,134,588.

Regarding claim 1, Kenner teaches apparatus for effecting the provision of content over a network, comprising:

means for receiving a request from a client for specified content (= requesting and retrieving video clips by the user at the user multimedia terminal) [see Abstract and Col. 4, Lines 43-64]; and

means for ascertaining that the node server transmitted the specified content to the client (= locating audio/video content on servers to transmit to the users) [see Col. 5, Lines 16-64], wherein an owner of the node server is offered an incentive as compensation for transmission of the specified content to the client (= placing advertisements and promotions) [see Col. 4, Lines 7-34 and Col. 19, Lines 8-37].

Kenner further teaches attaching the Regional Identifier (Regional ID) to the query and using the Regional ID to efficiently determine from among many remote Index Managers (IMs) 34, which remote IM 34 contains the requested video segments [see Fig. 3 and Col. 16, Lines 14-38 and Col. 18, Lines 26-53]. In addition, Kenner further teach enabling the client to request transmission of the specified content from the node server (= communicating between the web server and the user terminal for transmitting web page and video clips to the user terminal) [see Fig. 4 and Col. 22, Line 63 to Col. 23, Line 49].

Kenner does not explicitly teach means for communicating to the client the identity of a node server having the specified content stored thereon. However, Guenthner, in the same field of client-server communication for accessing the Web servers that host content requested by the Web browser endeavor, discloses using a list of IP addresses that are returned to the Web client upon an HTTP request wherein each of these IP addresses identifies a server that hosts the particular content that the user of the Web client has requested [see Guenthner, Fig. 3 and Col. 4, Lines 24-42]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Guenthner into the teaching of Kenner in order enable the client efficiently to request and obtain the specified content stored in a particular server by using the identity of the particular server.

Regarding claims 2-8, Kenner further teaches wherein the incentive varies in accordance with the bandwidth and/or latency performance of the node server in

transmitting the specified content to the client, in accordance with the bandwidth and/or latency performance of the node server relative to the bandwidth and/or latency characteristics of one or more other node servers that can provide the specified content to the client, in accordance with the number and/or topological proximity of one or more other node servers that can provide the specified content to the client, in accordance with the time of day at which the node server transmits the specified content to the client, wherein obtaining information regarding the characteristics of the transmission of the content such as when the content was delivered and regarding the bandwidth and/or latency performance associated with the transmission of the content (= bandwidth and/or latency performance and geographical proximity and timestamp) [see Col. 5, Lines 39-64 and Col. 12, Lines 14-55 and Col. 23, Lines 25-65 and Col. 25, Lines 21-54].

Regarding claims 9-11, Kenner further teaches means for identifying a plurality of node servers within the network that can act as a node server for distribution of the specified content, means for selecting from the plurality of node servers one or more candidate node servers, means for communicating the identity of the candidate node servers to the client to enable the client to request transmission of the specified content via the network from one of the candidate node servers, means for determining the location of the client within the network, means for identifying the locations of the plurality of node servers that can act as a node server for distribution of the specified content, wherein the means for selecting one or more candidate node servers further

comprises means for selecting from the plurality of node servers one or more candidate node servers that are determined to be topologically proximate to the client, wherein the determination of topological proximity to the client is performed using a breadth-first search to identify node servers that satisfy a criterion regarding topological proximity to the client [see Fig. 4 and Abstract and Col. 16, Lines 14-61 and Col. 23, Lines 3-65].

Regarding claims 12-14, Kenner further teaches means for identifying a network site that will act as a node server for distribution of the specified content, means for providing the specified content to the node server, means for identifying the location of a prospective node server that desires to act as a node server for distribution of the specified content, means for identifying the location of one or more other existing node servers that can act as a node server for distribution of the specified content, means for determining the topological proximity of the prospective node server to the existing node servers, wherein the prospective node server is selected as a node server for distribution of the specified content if the prospective node server satisfies a criterion regarding topological proximity to the existing node servers, wherein the means for determining the topological proximity of the prospective node server to the existing node servers is performed using an annealing method [see Fig. 4 and Col. 23, Lines 3-65].

Regarding claims 15-17, Kenner further teaches means for storing data identifying available content that can be obtained by a client, means for providing an identification of available content to the client, and means for storing data identifying the

location of the node server and wherein the content comprises visual content including moving images [see Fig. 4 and Col. 4, Line 43 to Col. 6, Line 16].

Regarding claims 18-20, Kenner further teaches the network is a computer network, the Internet, a television network [see Fig. 4 and Col. 8, Lines 14-50].

Regarding claim 21, Kenner and Guenthner do not explicitly teach the network is a wireless communications network. However, it would have been obvious to one of skilled in the art to implement a wireless communications network and devices in the networks are portable devices because it would have enabled the user to be mobilized while efficiently communicating with other devices wirelessly in the network from the remote area.

Regarding claims 22-25, Kenner further teaches a core server and a node server wherein the node server comprises means for storing the specified content and means for receiving a request to transmit the specified content to the client, means for transmitting the specified content to the client, and wherein the core server comprises means for identifying a network site that will act as a node server for distribution of the specified content, means for providing the specified content to the node server, means for receiving the specified content from the core server, wherein the core server and the node server are each implemented at least in part in a computer, wherein the node

server is implemented at least in part in a television set-top box [see Fig. 4 and Abstract and Col. 8, Lines 14-50 and Col. 16, Lines 14-61 and Col. 23, Lines 3-65].

Regarding claim 26, Kenner and Guenthner do not explicitly teach the node server is implemented at least in part in a portable device. However, it would have been obvious to one of skilled in the art to implement a wireless communications network and devices in the networks are portable devices because it would have enabled the user to be mobilized while efficiently communicating with other devices wirelessly in the network from the remote area.

Regarding claims 27-28, Kenner further teaches wherein the client comprising means for transmitting the request for the specified content to the core server, means for receiving the identity of the node server from the core server and means for receiving the specified content from the node server, wherein the node server and the client are each implemented at least in part in a television set-top box [see Fig. 4 and Abstract and Col. 8, Lines 14-50 and Col. 16, Lines 14-61 and Col. 23, Lines 3-65].

Regarding claims 29-33, Kenner further teaches the apparatus is a core server and the client comprising means for transmitting the request for the specified content to the core server, means for receiving the identity of the node server from the core server, means for receiving the specified content from the node server, means for transmitting a request to the node server to transmit the specified content to the client, means for

monitoring the characteristics of the transmission of the specified content from the node server to obtain auditing information regarding the transmission of the specified content from the node server to the client, and means for transmitting the auditing information to the core server, wherein the core server and the client are each implemented at least in part in a computer, wherein the client is implemented at least in part in a television set-top box [see Fig. 4 and Col. 8, Lines 14-50 and Col. 23, Lines 3-65].

Regarding claim 34, Kenner and Guenther do not explicitly teach the client is implemented at least in part in a portable device. However, it would have been obvious to one of skilled in the art to implement a wireless communications network and devices in the networks are portable devices because it would have enabled the user to be mobilized while efficiently communicating with other devices wirelessly in the network from the remote area.

Regarding claim 35, Kenner teaches apparatus for effecting the provision of content over a network, comprising:

means for receiving a request for content from a client (= requesting and retrieving video clips by the user at the user multimedia terminal) [see Abstract and Col. 4, Lines 43-64]; and

means for determining the location of the client within the network, means for identifying the location of a plurality of node servers within the network that have at least part of the requested content stored thereon (= attaching the Regional Identifier

(Regional ID) to the query and using the Regional ID to efficiently determine from among many remote Index Managers (IMs) 34, which remote IM 34 contains the requested video segments) [see Fig. 3 and Col. 16, Lines 14-38 and Col. 18, Lines 26-53], and

means for selecting from the plurality of node servers one or more candidate node servers that are determined to be topologically proximate to the client (= determining the closest server containing the request video clips and geographical distribution) [see Fig. 4 and Abstract and Col. 5, Lines 39-64 and Col. 16, Lines 14-61 and Col. 23, Lines 3-65].

In addition, Kenner further teach enabling the client to request transmission of the requested content via the network from one or more of the candidate node servers (= communicating between the web server and the user terminal for transmitting web page and video clips to the user terminal) [see Fig. 4 and Col. 22, Line 63 to Col. 23, Line 49].

Kenner does not explicitly teach means for communicating the identity of the candidate node servers to the client. However, Guenther, in the same field of client-server communication for accessing the Web servers that host content requested by the Web browser endeavor, discloses using a list of IP addresses that are returned to the Web client upon an HTTP request wherein each of these IP addresses identifies a server that hosts the particular content that the user of the Web client has requested [see Guenther, Fig. 3 and Col. 4, Lines 24-42]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching

of Guenther into the teaching of Kenner in order enable the client efficiently to request and obtain the specified content stored in a particular server by using the identity of the particular server.

Regarding claims 36-38, Kenner further teaches wherein the determination of topological proximity to the client is performed using a breadth-first search to identify node servers that satisfy a criterion regarding topological proximity to the client, and further comprising means for storing a topological database including a topological map of the network, wherein the means for selecting uses the topological map in making determinations of topological proximity to the client, wherein the topological database further includes data regarding bandwidth capacity and/or latency between at least some of the network sites included in the topological map [see Fig. 4 and Col. 23, Lines 3-65].

Regarding claim 39, Kenner further teaches apparatus as in claim 35, further comprising means for ascertaining which of the one or more of the candidate node servers transmitted requested content to the client (= locating audio/video content on servers to transmit to the users) [see Col. 5, Lines 16-64], wherein an owner of such node server is offered an incentive as compensation for transmission of requested content to the client (= placing advertisements and promotions) [see Col. 4, Lines 7-34 and Col. 19, Lines 8-37].

Claims 40-42 are rejected under the same rationale set forth above to claims 12-14.

Claims 43-45 are rejected under the same rationale set forth above to claims 15-17.

Claims 46-48 are rejected under the same rationale set forth above to claims 18-20.

Regarding claims 49-51, Kenner further teaches wherein the apparatus is a core server, the system further comprising one of the plurality of node servers, the node server comprising means for storing at least part of the requested content, means for receiving a request to transmit content to the client, and means for transmitting the requested content to the client and the client comprising means for transmitting a request for content to the core server, means for receiving the identity of one or more candidate node servers from the core server, means for selecting one or more of the candidate node servers from which to obtain content, means for transmitting a request to a selected node server to transmit content to the client, and means for receiving content in response to the request transmitted to the node server [see Fig. 4 and Abstract and Col. 5, Lines 17-64 and Col. 23, Lines 3-65].

Regarding claim 52, Kenner teaches apparatus for effecting the provision of content over a network, comprising:

means for identifying which of a plurality of sets of content or parts of the plurality of sets of content are stored by each of a plurality of node servers that are part of the network, wherein at least one of the plurality of sets of content or parts of the plurality of sets of content is stored on redundant node servers (= attaching the Regional Identifier (Regional ID) to the query and using the Regional ID to efficiently determine from among many remote Index Managers (IMs) 34, which remote IM 34 contains the requested video segments) [see Fig. 3 and Col. 16, Lines 14-38 and Col. 18, Lines 26-53];

means for receiving a request from a client that is part of the network for transmission of a set of content to the client, wherein at least part of the requested set of content is stored on redundant node servers (= requesting and retrieving video clips by the user at the user multimedia terminal) [see Abstract and Col. 4, Lines 43-64];

means for selecting from the plurality of node servers one or more candidate node servers that have stored thereon at least part of the requested set of content (= determining the closest server containing the request video clips and geographical distribution) [see Fig. 4 and Abstract and Col. 5, Lines 39-64 and Col. 16, Lines 14-61 and Col. 23, Lines 3-65].

In addition, Kenner further teach enabling the client to request transmission of the requested content via the network from one or more of the candidate node servers (= communicating between the web server and the user terminal for transmitting web page and video clips to the user terminal) [see Fig. 4 and Col. 22, Line 63 to Col. 23, Line 49].

Kenner does not explicitly teach means for communicating the identity of the candidate node servers to the client. However, Guenthner, in the same field of client-server communication for accessing the Web servers that host content requested by the Web browser endeavor, discloses using a list of IP addresses that are returned to the Web client upon an HTTP request wherein each of these IP addresses identifies a server that hosts the particular content that the user of the Web client has requested [see Guenthner, Fig. 3 and Col. 4, Lines 24-42]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Guenthner into the teaching of Kenner in order enable the client efficiently to request and obtain the specified content stored in a particular server by using the identity of the particular server.

Regarding claims 53-55, Kenner further teaches wherein the candidate node servers do not include all of the redundant node servers on which requested content is stored, and further comprising means for storing data representing a topological map of the network and means for determining the location of the client within the network, and wherein the means for selecting one or more candidate node servers further comprises means for selecting one or more candidate node servers that are determined to be topologically proximate to the client, wherein the determination of topological proximity to the client is performed using a breadth-first search to identify node servers that satisfy a criterion regarding topological proximity to the client [see Fig. 4 and Abstract and Col. 16, Lines 14-61 and Col. 23, Lines 3-65].

Regarding claim 56, Kenner further teaches means for ascertaining which of the one or more of the candidate node servers transmitted requested content to the client (= locating audio/video content on servers to transmit to the users) [see Col. 5, Lines 16-64], wherein an owner of such node server is offered an incentive as compensation for transmission of requested content to the client (= placing advertisements and promotions) [see Col. 4, Lines 7-34 and Col. 19, Lines 8-37].

Claims 57-59 are rejected under the same rationale set forth above to claims 11-13.

Claims 60-62 are rejected under the same rationale set forth above to claims 15-17.

Claims 63-65 are rejected under the same rationale set forth above to claims 18-20.

Regarding claims 66-68, Kenner further teaches the node server comprising means for storing a set of content or part of a set of content, means for receiving a request to transmit a set of content or part of a set of content to the client, and means for transmitting the requested set of content or part of a set of content to the client and the client comprising means for transmitting a request for a set of content to the core server, means for receiving the identity of one or more candidate node servers from the core server, means for selecting one or more of the candidate node servers from which to obtain content, means for transmitting a request to a node server to transmit a set of

content or part of a set of content to the client, and means for receiving a set of content or part of a set of content in response to the request transmitted to the node server [see Fig. 4 and Abstract and Col. 5, Lines 17-64 and Col. 23, Lines 3-65].

Claim 69 is rejected under the same rationale set forth above to claim 52. In addition, Kenner further teaches a television set top box [see Col. 8, Lines 14-25 and Col. 21, Lines 19-35].

Claim 70 is rejected under the same rationale set forth above to claim 56.

Claims 71-72 are rejected under the same rationale set forth above to claims 57-59.

Regarding claim 73, Kenner further teaches the content comprises visual content including moving images [see Col. 6, Lines 1-16].

Claims 74-76 are rejected under the same rationale set forth above to claims 66-68.

Claim 77 is rejected under the same rationale set forth above to claim 1.

Claims 78-80 are rejected under the same rationale set forth above to claims 2-8.

Claims 81-83 are rejected under the same rationale set forth above to claims 9-11.

Claims 84-86 are rejected under the same rationale set forth above to claims 12-14.

Claims 87-88 are rejected under the same rationale set forth above to claims 15-17.

Claims 89-91 are rejected under the same rationale set forth above to claims 22-25 and 27-28.

Claims 92-94 are rejected under the same rationale set forth above to claims 29-33.

Claim 95 is rejected under the same rationale set forth above to claim 35.

Claims 96-98 are rejected under the same rationale set forth above to claims 36-38.

Claim 99 is rejected under the same rationale set forth above to claim 39.

Claims 100-102 are rejected under the same rationale set forth above to claims 40-42.

Claims 103-104 are rejected under the same rationale set forth above to claims 43-45.

Claims 105-107 are rejected under the same rationale set forth above to claims 49-51.

Claim 108 is rejected under the same rationale set forth above to claim 52.

Claims 109-111 are rejected under the same rationale set forth above to claims 53-55.

Claim 112 is rejected under the same rationale set forth above to claim 56.

Claims 113-115 are rejected under the same rationale set forth above to claims 57-59.

Claims 116-117 are rejected under the same rationale set forth above to claims 60-62.

Claims 118-120 are rejected under the same rationale set forth above to claims 66-68.

Claim 121 is rejected under the same rationale set forth above to claim 1.

Claim 122 is rejected under the same rationale set forth above to claim 35.

Claim 123 is rejected under the same rationale set forth above to claim 52.

Claim 124 is rejected under the same rationale set forth above to claim 1.

Claim 125 is rejected under the same rationale set forth above to claim 35.

Claim 126 is rejected under the same rationale set forth above to claim 52.

Claim 127 is rejected under the same rationale set forth above to claim 69.

Conclusion

4. Applicant's arguments with respect to claims 1-127 have been considered but are moot in view of the new ground(s) of rejection.

Other References Cited

5. The following references cited by the examiner but not relied upon are considered pertinent to applicant's disclosure.

A) Rowe et al, U.S. Pat. No. 6,792,615.

B) Lutterschmidt, U.S. Pat. No. 6,356,947.

C) Wahl, U.S. Pat. No. 6,434,610.

D) Cohen et al, U.S. Pat. No. 6,389,462.

E) Li, U.S. Pat. No. 6,799,214.

F) Boesjes, U.S. Pat. No. 6,553,218.

6. A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION. FAILURE TO RESPOND WITHIN THE PERIOD FOR RESPONSE WILL CAUSE THE APPLICATION TO BECOME ABANDONED (35 U.S.C. § 133). EXTENSIONS OF TIME MAY BE OBTAINED UNDER THE PROVISIONS OF 37 CAR 1.136(A).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tran whose telephone number is (571) 272-3991. The Group fax phone number is (571) 273-8300. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar, can be reached on (571) 272-4006.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Philip B Tran/
Primary Examiner, Art Unit 2155
Apr 16, 2008